

Remarks

Applicant submits this response to the Examiner's Office Action of October 10, 2008. The period for response extends through April 10, 2009 with a petition for a three-month extension of time and payment of the required fee. The Office Action has been carefully reviewed and the following remarks are made in response thereto.

Claims 1, 3 and 7 have been amended. Claims 2, 6, 9, 12-13, 16-19 and 24-27 have been cancelled.

Support for "a retention rate between about 4 and 23 g of the bifenthrin per cubic meter of the wood product" of claim 1 can be found at least at page 3, lines 26-28 of application.

Support for "in water" of claim 1 can be found at least at page 6, lines 4-8 of application.

In view of the amendments and following remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

II. Response to the Office Action

1. Claim Rejections under 35 U.S.C. §112, Second Paragraph

Claims 1-11, 13-15 and 18-27 stand rejected, under 35 USC § 112, second paragraph, because it is alleged that they are indefinite. The Examiner states that, in the absence of evidence to the contrary, the method of applying a superficial treatment of bifenthrin to a

wood product inherently has a re-drying step after application because “merely allowing the wood product to sit at ambient conditions is a drying step” and “the moment the wood product is removed from the source of application (i.e., dipping, rolling, brushing, misting or spraying), the product inherently begins to dry as the solvent or carrier begins to evaporate.”

Without acquiescing to the grounds of the rejection and solely in an effort to expedite prosecution, the claims have been amended to remove the limitation “the wood product after the superficial treatment does not require re-drying” rendering the rejection moot. Withdrawal of this rejection is respectfully requested.

Claims 24-25 stand rejected, under 35 USC § 112, second paragraph, because it is alleged that they are indefinite. Without acquiescing to the grounds of the rejection and solely in an effort to expedite prosecution, claims 24-25 have been cancelled rendering the rejection moot. Withdrawal of this rejection is respectfully requested.

2. Claim Rejections under 35 U.S.C. §102(b)

a. Kodama *et al.*

Claims 1, 2, 6, 10, 11, 14, 20, 22 and 24-27 stand rejected under 35 USC § 102(b) as allegedly anticipated by U.S. Patent No. 5,747,519 (Kodama *et al.*). The Examiner asserts that Kodama *et al.* disclose treating wood, such as timber or wood, by impregnating the wood with bifenthrin. Applicant respectfully traverses this rejection. By this amendment, claim 1 has been amended to recite the limitation “spraying at a retention rate between about 4 and 23 g of bifenthrin per cubic meter of the wood product”.

Kodama *et al.* do not teach, or suggest the claimed retention rate of between about 4 and 23 g of the bifenthrin per cubic meter *of the wood product*. In fact, Kodama *et al.* is directed to termite control methods *for soil treatment* by spraying a control agent on the soil and/or under the floor (col. 1, lines 32-48; col. 3, lines 15-20). Kodama *et al.* disclose that when the composition is used for *soil treatment*, the quantity of the effective ingredient may be within a range between 0.01 g and 7 g, preferably between 0.1 g and 5 g per square meter. (col. 3, lines 15-20).

Thus, Kodama *et al.* do not anticipate or suggest the pending claims. Accordingly, Kodama *et al.* neither disclose nor suggest the claimed methods for preserving wood product or the resulting wood products. Applicant respectfully requests withdrawal of this rejection.

b. Wimmer *et al.*

Claims 1, 2, 6, 10, 11, 14, 20, 22 and 24-27 stand rejected under 35 USC § 102(b) as being allegedly anticipated by CA 2 321 353 (Wimmer *et al.*). The Examiner alleges that Wimmer *et al.* disclose a wood preservative comprising a cyclodextrin, tebuconazole, propiconazole and bifenthrin and a method of protecting wood by treating with the composition comprising bifenthrin. Applicant respectfully traverses this rejection. By this amendment, claim 1 has been amended to recite the limitation of “spraying at a retention rate between about 4 and 23 g of bifenthrin per cubic meter of the wood product”.

Wimmer *et al.* do not teach or suggest the claimed retention rate of between about 4 and 23 g of bifenthrin per cubic meter of the wood product. Wimmer *et al.* disclose that an aqueous wood preservative concentrate comprises water and 1-5% by weight of hydrophobic fungicide or insecticide and 5-70% by weight of cyclodextrin derivative. (page 3, lines 1-3; page 5, lines 6-14).

Accordingly, Applicant respectfully submits that Wimmer *et al.* do not anticipate the pending claims because the reference does not disclose nor suggest the claimed method for preserving wood product. Applicant respectfully requests withdrawal of this rejection.

c. Takahide *et al.*

Claims 1, 10, 11, 14 and 24-26 stand rejected under 35 USC § 102(b) as being allegedly anticipated by JP 11-207706 (Takahide *et al.*). Applicant respectfully traverses this rejection. By this amendment, claim 1 has been amended to recite the limitation of “spraying at a retention rate between about 4 and 23 g of bifenthrin per cubic meter of the wood product”.

Takahide *et al.* do not teach each and every element of the claimed invention. Takahide *et al.* do not teach, or suggest the claimed retention rate of between about 4 and 23 g of bifenthrin per cubic meter of the wood product. Takahide *et al.* is drawn to a composition comprising wood antiseptic component (A) and an insecticide component (B). Propiconazole is disclosed as component (A) and bifenthrin is disclosed as component (B). Takahide *et al.* disclose that propiconazole in a wood antiseptic component comprises 0.03 to 0.05% of the

weight and the weight ratio of propiconazole (component (A)) and an insecticidal component (B) is 1.0-15.0. ([0014], [0015] and [0016]).

Accordingly, Applicant respectfully submits that Takahide *et al.* do not anticipate the pending claims because the reference does not disclose nor suggest the claimed method for preserving wood product. Applicant respectfully requests withdrawal of this rejection.

d. Shires *et al.*

Claims 1, 2, 6, 7, 9-11, 13-15, 20, 22 and 24-27 stand rejected under 35 USC § 102(b) as allegedly anticipated by Shires *et al.* (The International Research Group on Wood Preservation, 19-24 May 1996). Applicant respectfully traverses this rejection. By this amendment, claim 1 has been amended to recite the limitation of “in water” and “spraying at a retention rate between about 4 and 23 g of bifenthrin per cubic meter of the wood product”.

Shires *et al.* do not teach each and every element of the claimed invention. As the Examiner acknowledged, Shires *et al.* disclose bifenthrin as a wood preservative and a superficial treatment of pine and beech wood with a light organic solvent product comprising bifenthrin (Office Action at page 8).

Accordingly, Applicant respectfully submits that Shires *et al.* do not anticipate the pending claims. Shires *et al.* neither disclose nor suggest the claimed method for preserving wood product. Applicant respectfully requests withdrawal of this rejection.

e. Jaetsch *et al.*

Claims 1, 10, 11, 14, 20, 22 and 24-27 stand rejected under 35 USC § 102(b) as being allegedly anticipated by EP 1 018 413 (Jaetsch *et al.*). Applicant respectfully traverses this rejection. By this amendment, claim 1 has been amended to recite the limitations of “in water” and “spraying at a retention rate between about 4 and 23 g of the bifenthrin per cubic meter of the wood product”.

Jaetsch *et al.* do not teach each and every element of the claimed invention. Jaetsch *et al.* disclose insecticidal treatment of the backside of plywood with bifenthrin dissolved in solvents. Jaetsch *et al.* teach the application of a biocide-containing glue containing phenolic compounds and other anti-insect, anti-termite, and anti-fungal agents to wood (See paragraph 21). Contrary to the Examiner’s allegation, there is no teaching in Jaetsch *et al.* that the chemical formulations of the glue containing the organic phenol compounds is dissolved in water. Further, Jaetsch *et al.* only disclose that the appropriate combination ratio of the phenolic compound and the anti-basidiomycetes, anti-termite and anti-fungal agents is in the range of 0.1-10.0:1.0. ([0017])

Accordingly, Applicant respectfully submits that Jaetsch *et al.* do not anticipate the pending claims because the reference does not disclose nor suggest the claimed method for preserving a wood product. Applicant respectfully requests withdrawal of this rejection.

f. Yu

Claims 1, 2, 10, 11, 14, 20, 22 and 24-27 are rejected under 35 USC § 102(b) as being allegedly anticipated by U.S. Patent No. 5,536,305 (Yu). By this amendment, claim 1 has been amended to recite the limitations of “in water” and “spraying at a retention rate between about 4 and 23 g of the bifenthrin per cubic meter of the wood product”.

Yu does not teach each and every element of the claimed invention. Yu does not teach, or suggest the claimed retention rate of between about 4 and 23 g of the bifenthrin per cubic meter of the wood product. In fact, Yu is silent as to the retention rate of the wood preservative of the wood product.

Accordingly, Applicant respectfully submits that Yu does not anticipate the pending claims. Yu neither discloses nor suggests the claimed method for preserving a wood product. Applicant respectfully requests withdrawal of this rejection.

g. Nakabayashi *et al.*

Claims 1-5, 10, 11, 14, 24, 25 and 27 are rejected under 35 USC § 102(b) as being anticipated by JP 2000-225607 (Nakabayashi *et al.*). By this amendment, claim 1 has been amended to recite the limitations of “in water” and “spraying at a retention rate between about 4 and 23 g of the bifenthrin per cubic meter of the wood product”.

Nakabayashi *et al.* do not teach, or suggest the claimed retention rate of between about 4 and 23 g of the bifenthrin per cubic meter of the wood product. In fact, as the Examiner acknowledged, Nakabayashi *et al.* is directed to a method of spraying a drug solution containing

bifenthrin *in petroleum solvent* to the timber and the amount of bifenthrin in the solution is about 0.05%. ([0035])

Thus, Nakabayashi *et al.* do not anticipate or suggest the pending claims because the reference does not disclose nor suggest the claimed methods for preserving wood product or the resulting wood products. Applicant respectfully requests withdrawal of this rejection.

2. Claim Rejections under 35 U.S.C. §103(a)

a. Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, and Yu in view of Heitmanek

Claims 3-5 stand rejected under 35 USC § 103(a) as allegedly unpatentable over Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, and Yu as applied to the claims in view of U.S. Patent No. 4,894,262 (Heitmanek). The Examiner alleges that Heitmanek teaches treating lumber by spraying at the sawmill to seal the sides and ends to maintain the moisture content of the wood and it would have been *prima facie* obvious for one skilled in the art at the time of the invention to apply the bifenthrin composition to the timber product of Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, and Yu while the timber product is at the sawmill and has been stress graded and freshly cut by a docker saw in order to seal/protect the sides and the ends, as taught by Heitmanek. Applicant respectfully traverses this rejection.

Applicant's comments with respect to Kodama *et al.*, Wimmer *et al.*, Shires *et al.* and Yu as discussed above are incorporated herein by reference. None of these references teach each and every element of the claimed invention. This is because none of the cited references disclose the limitations of "in water" and "spraying at a retention rate between about 4 and 23 g

of the bifenthrin per cubic meter of the wood product” of the pending claims. Nothing in the cited references teaches or even remotely suggests these limitations. As such, Kodama *et al.*, Wimmer *et al.*, Shires *et al.* or Yu cannot anticipate or render the claims obvious.

Heitmanek does not remedy these deficiencies. Heitmanek only discloses a lumber-end-sealing machine, utilizing a single spraying machine and exhaust system, and non-contact masking of the end of a lumber package through the use of traveling and rotating sealer paint spray guns. The combined teachings of Kodama *et al.*, Wimmer *et al.*, Shires *et al.* and Yu, in view of Heitmanek, would not yield the claimed methods of claims 3-5, as amended. Accordingly, Applicant respectfully requests withdrawal of this rejection.

b. Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* in view of Richardson (Wood Preservation, 1993)

Claim 8 stands rejected under 35 USC § 103(a) as allegedly unpatentable over Kodama *et al.*, Wimmer *et al.*, Takahide *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* in view of Richardson (Wood Preservation, 1993). Applicant respectfully traverses this rejection.

Applicants comments with respect to Kodama *et al.*, Wimmer *et al.*, Takahide *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* as discussed above are incorporated by reference herein.

The Examiner acknowledges that Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* do not teach treating timber with bifenthrin while the

wood is warmer than room temperature, however, the Examiner alleges that it is very common to treat wood with preservatives wherein the wood is at elevated temperature, as evidenced by Richardson.

None of Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* teach each and every element of the claimed invention. None of the cited references disclose the limitations of “in water” and “spraying at a retention rate between about 4 and 23 g of the bifenthrin per cubic meter of the wood product” of the pending claims. Nothing in the cited references teaches or even remotely suggests these limitations. As such, Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* cannot anticipate or render the claims obvious.

Richardson does not remedy these deficiencies. Richardson discloses a general overview of the preservation technology for wood treatment, in which heating may be helpful to achieve the reasonable penetration of the preservatives. Because the required claim limitations are simply not disclosed or suggested in Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.*, the Examiner's assertion that the combination of teachings of Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* with Richardson renders the claims obvious relies entirely on an improper hindsight analysis.

Applicant respectfully submits that the Examiner's combination of references do not teach every element of the pending claims, nor do they render the claimed invention obvious. Accordingly, withdrawal of the rejection is respectfully requested.

c. **Kodama *et al.*, Wimmer *et al.*, Takahide *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* in view of Creffield *et al.***

Claims 21 and 23 stand rejected under 35 USC § 103(a) as allegedly obvious over Kodama *et al.*, Wimmer *et al.*, Takahide *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* in view of Creffield. *et al.* (The International Research Group on Wood Preservation, 12-17 May 2002). Applicant respectfully traverses this rejection.

Applicant's comments above with respect to Kodama *et al.*, Wimmer *et al.*, Takahide *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* are incorporated herein by reference.

The Examiner acknowledges that Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* do not teach the wood product to comprise radiate pine, but alleges that Creffield. *et al.* teach treating P. radiate sapwood specimens to a retention rate of 2.5, 5, 10, 15, 20, 30 and 50 g/m³ of bifenthrin with white spirit as the solvent.

None of Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* teach each and every element of the claimed invention. None of the cited references disclose the limitations of "in water" and "spraying at a retention rate between about 4 and 23 g of the bifenthrin per cubic meter of the wood product" of the pending claims. Nothing in the cited references teaches or even remotely suggests these limitations. As such, Kodama *et al.*, Wimmer *et al.*, Shires *et al.*, Jaetsch *et al.*, Yu and Nakabayashi *et al.* cannot anticipate or render the claims obvious.

Creffield. *et al.* do not remedy these deficiencies. As the Examiner acknowledged, white spirit is used as solvent in Creffield. *et al.* There would have been absolutely no motivation to modify Creffield. *et al.* to prepare a bifenthrin formulation in water.

Applicant respectfully submits that the Examiner's combination of references do not teach every element of the pending claims, nor do they render the claimed invention obvious. Accordingly, withdrawal of the rejection is respectfully requested.

d. Wimmer *et al.*, Shires *et al.*, and Yu

Claims 18 and 19 are rejected under 35 USC § 103(a) as allegedly obvious over Wimmer *et al.*, Shires *et al.*, and Yu. Applicant respectfully traverses this rejection.

Without acquiescing to the grounds of rejection and solely in an effort to expedite prosecution, claims 18-19 have been cancelled, rendering the rejection moot. Accordingly, withdrawal of the rejection is respectfully requested.

IV. Conclusion.

Applicant believes that the above-referenced application is in condition for allowance. Reconsideration and withdrawal of the outstanding rejections and early notice of allowance to that effect is respectfully requested.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Director is hereby authorized by this paper to charge any additional fees during the entire pendency of this application, including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 13-3250, reference No. 38184.04113US.

This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F. R. § 1.136(a)(3).

If the Examiner finds that a telephone conference would further prosecution of this application, the Examiner is invited to contact the undersigned at 202-835-7523.

Respectfully submitted,

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